Remarks

Claims 1-27 are pending in the present application. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derkacs et al. and further in view of Kato et al. Claims 9, 15, and 17 are rejected under 35 U.S.C. 112.

Claim 4 is canceled.

Independent claim 1 is amended such that the mold is linearly translated along at least one linear axis for a discrete time period during the step of directing the metallic spray onto an adjacent portion of the ceramic mold. Independent claim 20 is similarly amended so translatable along at least one linear axis for a discrete time period while a metallic spray is directed onto an adjacent portion of the ceramic mold. No new matter is added by these amendments.

As provided by amended claims 1 and 20, combining translation with rotation is particularly useful in coating large parts. The Specification explains:

> The present variation allows for the maximum sized part to be coated by a given coating apparatus. Often the coating apparatus will be situated in a confined space possibly making translation of the mold in all directions impossible. Accordingly, coordination of step d and the translation of the mold allows for larger molds to be coated.
>
> Specification, paragraph 0038

Claims 5 and 6 are amended to depend from claim 1.

a. Rejections under 35 U.S.C. §112

Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Examiner states that:

> The claim recites that less than about 10% of the coating formed by the metal spray forms during rotation. It is not clear how the 90% or more of the coating is formed.
>
> Office Action dated April 29, 2005

Applicant respectfully traverses the Examiner's contention that it is unclear how the 90% or more of the coating is formed. In claim 1, metallic spray is directed onto the molds during steps c and e with step e being repeated. Rotation of the mold occurs in step d. Claim 17 says that spray is not stopped during rotation. Therefore spraying under claim 17 occurs during steps c, d, and e with less than 10% during step d. Accordingly, the other 90% inescapably occurs during steps c and e.

Accordingly, claim 17 is allowable over 35 U.S.C. §112 since there is no ambiguity as to when the other 90% of the metallic spraying occurs.

b. <u>Rejections under 35 U.S.C. §103(a)</u>

Claims 1-27 are pending in the present application. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derkacs et al. and further in view of Kato et al.

The Applicant continues to rely on the arguments set forth in his March 16, 2005 response. The Applicant further points out that Derkacs et al. is incompatible with the requirement that the "mold that is the inverse of the article" as required by independent claims 1 and 20 of the present invention. Derkacs et al. does not disclose a mold having such a feature as suggested by the Examiner. With the passages cited by the Examiner, Derkacs et al. states:

> In FIGS. 12 through 16 an example of an application of such a nonuniform covering to fabricate an airfoil is disclosed. However, it should be emphasized that a **nonuniform covering** could be applied to any base capable of receiving the covering in order **to provide for the build-up of material in such a**

> **manner as to form an object having any desired configuration.**
>
> Derkacs et al., col. 21, ll. 12-18 (emphasis added)

The requirement that the mold is the inverse of the article means that when the mold and formed article are separated, the revealed surface of the article is the working surface that is used in "in stamping, die casting and molding." (Specification, paragraph 0006). In Derkacs et al. the mold is not the inverse of the article. This is clear since in Derkacs et al. a nonuniform covering is used to provide a build up of material where needed to form the part (i.e., the airfoil). Moreover, in Derkacs et al. removal of the mold results in a hollow internal cavity being formed making it clear that the mold is not an article inverse. (Derkacs el al., col. 21, ll. 57-63.) Since Kato et al. also does not provide for a mold that is the inverse of the article claims 1-27 are allowable over Derkacs et al. and Kato et al. whether considered independently or in combination.

Applicant has amended claims 1 and 20 such that the mold is linearly translated along at least one linear axis for a discrete time period during the step of directing the metallic spray onto an adjacent portion of the ceramic mold. Neither Derkacs nor Kato et al. disclose a process in which the mold is translated during spraying. Accordingly, for at least this additional reason claims 1-27 are allowable over Derkacs et al. and Kato et al. whether considered independently or in combination

Conclusion

Applicant has made a genuine effort to respond to each of the Examiner's rejections in advancing the prosecution of this case. Applicant believes that all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested. If a telephone or video conference would help expedite allowance or resolve any additional questions, such a conference is invited at the Examiner's convenience.

Applicant believes that no additional fees are required as a result of the filing of this paper. However, the Examiner is authorized to charge any additional fees or credits as a result of the filing of this paper to Ford Global Technologies, Inc.'s Deposit Account No. 06-1510 as authorized by the original transmittal letter in this case. If a telephone or video conference would help expedite allowance or resolve any additional questions, such a conference is invited at the Examiner's convenience.

Respectfully submitted,

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